

JACOBSSON et al.
Serial No. 10/751,104

Atty Dkt: 4127-11
Art Unit: 2817

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An oscillator circuit comprising:
a first differential oscillator and a second differential oscillator, the first differential oscillator comprising at least one fundamental frequency AC-ground point, the second differential oscillator comprising at least one fundamental frequency AC-ground point, the first differential oscillator and the second differential oscillator having substantially the same fundamental frequencies, ~~characterized in that the oscillator circuit comprises~~

a first AC coupling between one of the at least one fundamental frequency AC-ground points of the first differential oscillator and one of the at least one fundamental frequency AC-ground points of the second differential oscillator, thus locking the first differential oscillator to the second differential oscillator.

2. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~ wherein the oscillator circuit comprises a first quadruple frequency output, the first quadruple frequency output being coupled to the first AC coupling.

3. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~ wherein the first differential oscillator and the second differential oscillator are substantially identical.

4. (Currently Amended) The oscillator circuit according to claim 3, ~~characterized in that~~ wherein the first AC coupling is between a first fundamental frequency AC-ground point of the first differential oscillator and a first fundamental frequency AC-ground point

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of the second differential oscillator, the first fundamental frequency AC-ground points being identical fundamental frequency AC-ground points.

5. (Currently Amended) The oscillator circuit according to claim 4, characterized ~~in that~~ wherein the oscillator circuit comprises four fundamental frequency outputs, the four outputs being in quadrature.

6. (Currently Amended) The oscillator circuit according to claim 4, characterized ~~in that~~ wherein the oscillator circuit comprises a second AC coupling between a second fundamental frequency AC-ground point of the first differential oscillator and a second fundamental frequency AC-ground point of the second differential oscillator, the second fundamental frequency AC-ground points being identical fundamental frequency AC-ground points.

7. (Currently Amended) The oscillator circuit according to claim 6, characterized ~~in that~~ wherein the oscillator circuit comprises a second quadruple frequency output, the second quadruple frequency output being coupled to the second AC coupling, the first and second quadruple frequency outputs being differential.

8. (Currently Amended) The oscillator circuit according to claim 4, characterized ~~in that~~ wherein the oscillator circuit comprises a third differential oscillator having at least a first fundamental frequency AC-ground point.

9. (Currently Amended) The oscillator circuit according to claim 8, characterized ~~in that~~ wherein the first AC coupling is further AC coupled to the first fundamental frequency AC-ground point of the third differential oscillator.

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10. (Currently Amended) The oscillator circuit according to claim 8, ~~characterized in that~~wherein the oscillator circuit comprises a second AC coupling between a second fundamental frequency AC-ground point of the first differential oscillator and a second fundamental frequency AC-ground point of the third differential oscillator, the second fundamental frequency AC-ground points being identical fundamental frequency AC-ground points and separate from the first fundamental frequency AC-ground points.

11. (Currently Amended) The oscillator circuit according to claim 8, ~~characterized in that~~wherein the third differential oscillator has substantially a same fundamental frequency as the first and second differential oscillators.

12. (Currently Amended) The oscillator circuit according to claim 8, ~~characterized in that~~wherein the third differential oscillator has a fundamental frequency which is substantially twice the frequency as the fundamental frequencies of the first and second differential oscillators.

13. (Currently Amended) The oscillator circuit according to claim 8, ~~characterized in that~~wherein the oscillator circuit comprises a fourth differential oscillator having at least a first fundamental frequency AC-ground point.

14. (Currently Amended) The oscillator circuit according to claim 13, ~~characterized in that~~wherein the first AC coupling is further AC coupled to the first fundamental frequency AC-ground point of the fourth differential oscillator.

15. (Currently Amended) The oscillator circuit according to claim 13, ~~characterized in that~~wherein the oscillator circuit further comprises a third AC coupling between a fundamental frequency AC-ground point of the second differential oscillator being separate from the first fundamental frequency AC-ground point and a

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corresponding fundamental frequency AC-ground point of the fourth differential oscillator.

16. (Currently Amended) The oscillator circuit according to claim 13, ~~characterized in that~~wherein the fourth differential oscillator ~~having~~has a fundamental frequency which is substantially the frequency of the fundamental frequency of the first and second differential oscillator.

17. (Currently Amended) The oscillator circuit according to claim 13, ~~characterized in that~~wherein the fourth differential oscillator ~~having~~has a fundamental frequency which is substantially twice the frequency of the fundamental frequency of the first and the second differential oscillator.

18. (Currently Amended) The oscillator circuit according to claim 13, ~~characterized in that~~wherein the fourth differential oscillator ~~having~~has a fundamental frequency which is substantially twice the frequency of the fundamental frequency of the third differential oscillator.

19. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~wherein one AC coupling between two fundamental frequency AC-ground points[[,]] is further coupled to a voltage source via an AC-impedance element.

20. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~wherein one AC coupling between two fundamental frequency AC-ground points, is further coupled to ground via an AC-impedance element.

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21. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~wherein one AC coupling between two fundamental frequency AC-ground points is a direct coupling.

22. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~wherein one AC coupling between two fundamental frequency AC-ground points is a resistive coupling.

23. (Currently Amended) The oscillator circuit according to claim 1, ~~characterized in that~~wherein one AC coupling between two fundamental frequency AC-ground points is a capacitive coupling.

24. (Currently Amended) An oscillator circuit comprising at least two differential oscillators, the differential oscillators comprising at least one fundamental frequency AC-ground point each, ~~characterized in that~~wherein the oscillator circuit comprises at least one AC coupling between one of the at least one fundamental frequency AC-ground points of one of the differential oscillators and one of the at least one fundamental frequency AC-ground points of another one of the differential oscillators.

25. (Currently Amended) A communication unit, ~~characterized in that the communication unit comprises~~ comprising an oscillator circuit according to claim 1.

26. (Currently Amended) A method of frequency locking a first differential oscillator to a second differential oscillator, ~~characterized in that the method comprises~~ comprising AC coupling a fundamental frequency AC-ground of the first differential oscillator with a fundamental frequency AC-ground of the second differential oscillator.